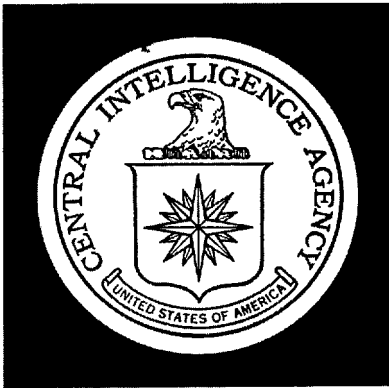


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DIRECTORATE OF  
INTELLIGENCE

# *WEEKLY SUMMARY*

## *Special Report*

*Soviet Air Show Emphasizes New Aircraft*

**Secret**

45

11 August 1967  
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## SOVIET AIR SHOW EMPHASIZES NEW AIRCRAFT

The aircraft shown in the Moscow air show of 8 and 9 July 1967 reflect the USSR's current stress on improving air support for its theater forces. Ten new or modified fighters were demonstrated, including two with movable wings. Many of the aircraft were known to US intelligence. Two models have been flying for several years.

Only one of the new aircraft is believed to be in production now. Several are clearly experimental and will not be series-produced. One new vertical take-off-and-landing (VTOL) aircraft was demonstrated, and three models equipped with lift engines for short take-off and landing (STOL) were shown. The deployment of these aircraft will significantly improve the capability of the Soviet Tactical Air Force to engage in conventional warfare.

The Moscow show featured a demonstration in which transport aircraft landed tactical rockets and air defense missile systems for airborne troops. No new heavy bombers were shown, and there is no evidence that the Soviets are developing such aircraft.

New Fighter Aircraft

The number and variety of new fighters displayed in this first major public showing of combat aircraft since 1961 suggest a Soviet intention to improve all aspects of fighter aviation. One of the new fighters will be assigned to the air defense forces, indicating that the Soviets will continue to use manned aircraft for strategic defense. At least one of the others is expected to be deployed in units of the Soviet Tactical Air Force in 1969 or 1970. A variable-geometry (swing-wing) aircraft may be developed for deployment between 1971 and 1973 as a multipurpose tactical fighter.

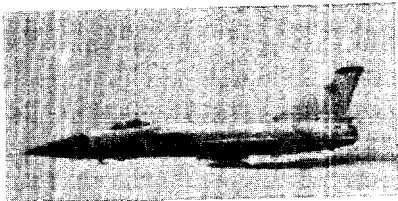
The new fighters are designed to carry loads heavier than those of fighters in operational service. Four employ side inlets for the jet engines, leaving the forward portion of the fuselage free for weapons or sophisticated electronic equipment.

New High-Performance Fighters

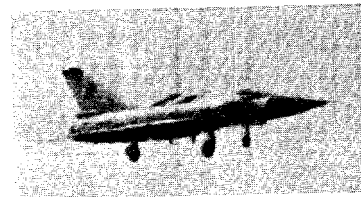
A twin-jet all-weather interceptor designed by P. O. Sukhoy is the only new fighter in the show believed to be in production at the present time. One of these fighters made a high-speed pass, and nine flew by in a formation flight.

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**Twin-jet Sukhoy Fighter**



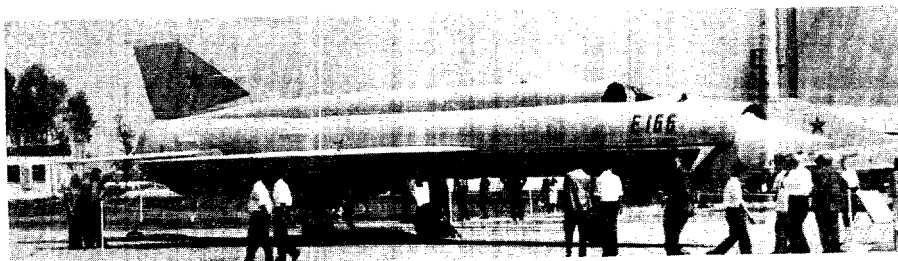
**Twin-jet Sukhoy Fighter  
Modified For Short Take Off  
And Landing**



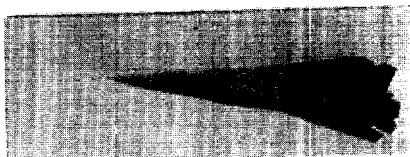
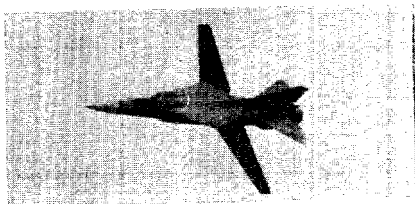
**Twin-jet Mikoyan Fighter**



**Single-jet Mikoyan Fighter**



**Test Aircraft E-166**



**Mikoyan Variable-Geometry Aircraft  
Shown With Wings Fully Extended And Swept**



**Sukhoy Variable-Geometry Aircraft (SU-7)**

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25X1 The aircraft (Photo A) is be-  
 25X1 lieved to be in production at No-  
 vosibirsk, [REDACTED]

is estimated that about 35 of these twin-jet fighters have been produced. The aircraft is expected to be operational with air defense forces by early 1968. Its top speed is beyond Mach 2.5 and it probably can climb to altitudes above 65,000 feet. A variant of this aircraft, equipped with both lift and cruise engines, has an STOL capability (Photo B).

Another new twin-jet fighter displayed (Photo C) in the show was designed by A. I. Mikoyan and described by the Soviets as both a fighter-bomber and an all-weather interceptor. The Soviets claim it is capable of a high rate of climb and can fly several times the speed of sound. Its configuration suggests that it too is capable of speeds exceeding Mach 2.5. At least four of these fighters have been produced, indicating extensive testing, and series production could begin before the end of the year. It is expected to be deployed with the Tactical Air Force within the next two to three years.

A new single-jet delta-wing fighter designed by Mikoyan was seen for the first time in the show (Photo D). It was described as capable of attacking targets at both high and low altitudes. It is equipped both with auxiliary lift engines and with a cruise engine, and demonstrated STOL capabilities similar to those of the Sukhoy interceptor. No

armament was observed on the fighter, which probably is still in the early stages of developmental testing.

An aircraft designated E-166 (Photo E) which had never been seen previously by Western observers was exhibited but not flown. This experimental aircraft was built in 1959 and set world records for speed and altitude in 1961 and 1962. It was built for testing purposes and will not be deployed. The newest record-breaking Soviet fighter, the E-266, was not exhibited.

A Mikoyan-designed variable-geometry aircraft gave an extensive demonstration (Photos F). It executed a series of maneuvers with its wings in various positions, from fully extended to fully swept. There appeared to be no difficulty in moving the wings to any intermediate position. The design of the wing resembles that of the US F-111, although the Soviet aircraft is a smaller, single-engine fighter, and the wings, when fully swept, do not join the tail in a complete delta. The Soviet press described the aircraft as a multipurpose fighter. Considerable testing probably will be needed before an operational variant can be produced.

A movable-wing variant of the Sukhoy-designed SU-7 also was shown (Photo G). Only the outer panels of the wings are movable. The aircraft probably represents an early effort in variable-geometry testing and is unlikely to be operationally deployed.

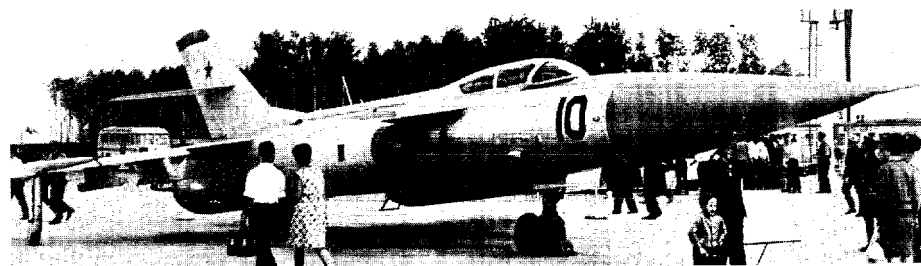
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**Yakovlev Vertical-Take-Off-And-Landing  
Fighter (YAK-V)**



**Fishbed (MIG-21) Modified For Short Take Off And Landing**



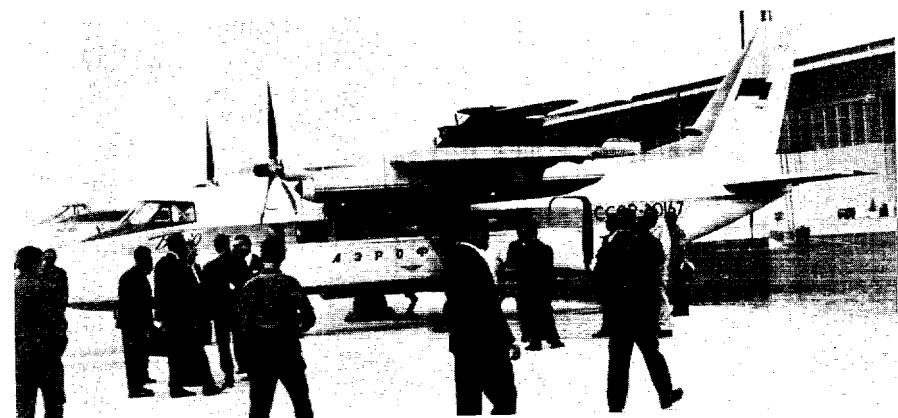
**Modified Firebar  
(YAK-28P)**



**Trainer Version Of Fitter (SU-7)**



**Blinder With  
AS-4 Missile**



**Twin-Turboprop  
Transport (BE-30)**

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VTOL and STOL Aircraft

An experimental aircraft designed by A. S. Yakovlev demonstrated its vertical take-off-and-landing capabilities at the show. The aircraft (Photo H) is equipped with two swivel-nozzle engines that provide power for both vertical flight and cruising. Work on the aircraft, designated the YAK-V, began in 1962, and one test model was completed in 1963. It is still in the experimental phase of development, and operational deployment of the aircraft in its present configuration is not expected.

In addition to the new Mi-koyan fighter and the Sukhoy interceptor, a modified MIG-21 also demonstrated STOL capabilities (Photo I). It was equipped with special lift engines similar to those of the Sukhoy and Mi-koyan fighters. Another MIG-21 equipped with lift devices demonstrated its ability to land on short runways. This feature probably has been incorporated in most of the MIG-21s produced in the last two years.

Modified Fighter

A YAK-28 interceptor exhibited on the ground (Photo J) incorporated modifications not on operational models of that aircraft. Its radome nose has been lengthened and may contain new or modified radar or fire-control equipment. The aircraft also is equipped with four air-to-air missile pylons instead of the two seen on all YAK-28 models

previously observed. The two additional pylons are of a type used for AA-2 Atoll infrared-homing missiles, rather than for the AA-3a semiactive or AA-3b infrared missiles normally carried on the YAK-28.

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At present there is no evidence that YAK-28s in operational units have been modified.

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A trainer version of the SU-7 was seen at Moscow (Photo K). While various reports have indicated the existence of an SU-7 trainer, this is the first time the aircraft has been displayed.

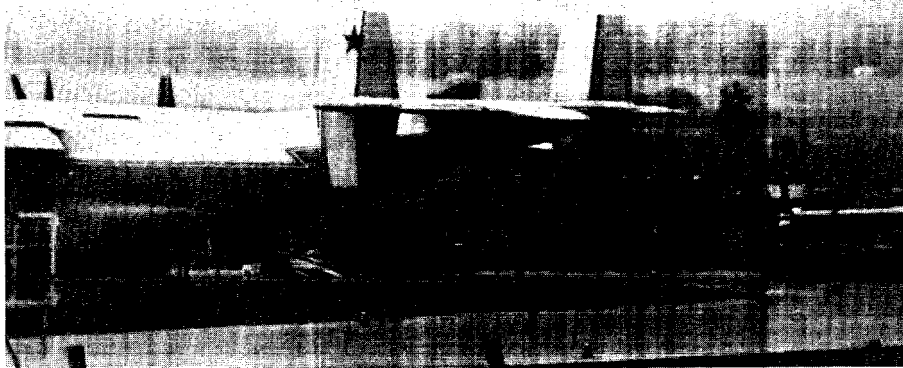
Other Significant Displays

Twenty-two Blinder supersonic-dash medium bombers, most of them equipped with air-to-surface missiles, flew by at the end of the aerial demonstration (Photo L). The number of missile-equipped aircraft suggests that this new air-to-surface weapons system is now in limited operational service and that a full operational capability can be achieved within the next year. No new heavy bombers were shown, and there is no evidence that the Soviets are developing such aircraft.

The one new transport aircraft unveiled was a small twin-turboprop transport designated the BE-30 which can carry 14 passengers and should be well suited for both civil and military use. It can operate from short and relatively undeveloped airstrips (Photo M).

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**Cock (AN-22) Heavy Transport Offloading FROG Missiles**

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The Soviets conducted an airborne assault operation involving the drop of about 1,000 paratroops from AN-12 medium transports and the landing of troops and equipment by heavy and medium transports and by helicopters. A highlight of the operation was the landing of tactical rocket and surface-to-air missile systems by AN-22 heavy transports. One unloaded a jeep and three FROG tactical missiles, and two AN-22s each

unloaded one jeep and two Ganef surface-to-air missiles (Photo N).

A flyby of civil aircraft included examples of most of the transports currently in service or being flight-tested. One feature was the demonstration of a short landing--about 3,000 feet--by an IL-62 heavy turbofan transport using reverse-thrust engines. (SECRET)

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